

The Euro – Conception, Complications & Prognosis

Mohammed Amin MA FCA AMCT CTA (Fellow)

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- Nothing in this presentation is intended to constitute professional advice.
- The presenter accepts no responsibility to anyone who may act, or refrain from acting, as a result of anything shown or said during this presentation.

Mohammed Amin



Mohammed Amin graduated in mathematics from Cambridge University.

Until 31 December 2009, he was a partner in PricewaterhouseCoopers LLP and an elected member of the firm's Supervisory Board. For four years he led the firm's Finance & Treasury Tax Network and his Finance & Treasury blog was the first official PwC blog anywhere in the world.

He is:

- a chartered accountant, a chartered tax adviser and a qualified corporate treasurer
- a Council member of the Chartered Institute of Taxation
- a member of the Policy & Technical Committee of the Association of Corporate Treasurers

www.mohammedamin.com

Overview

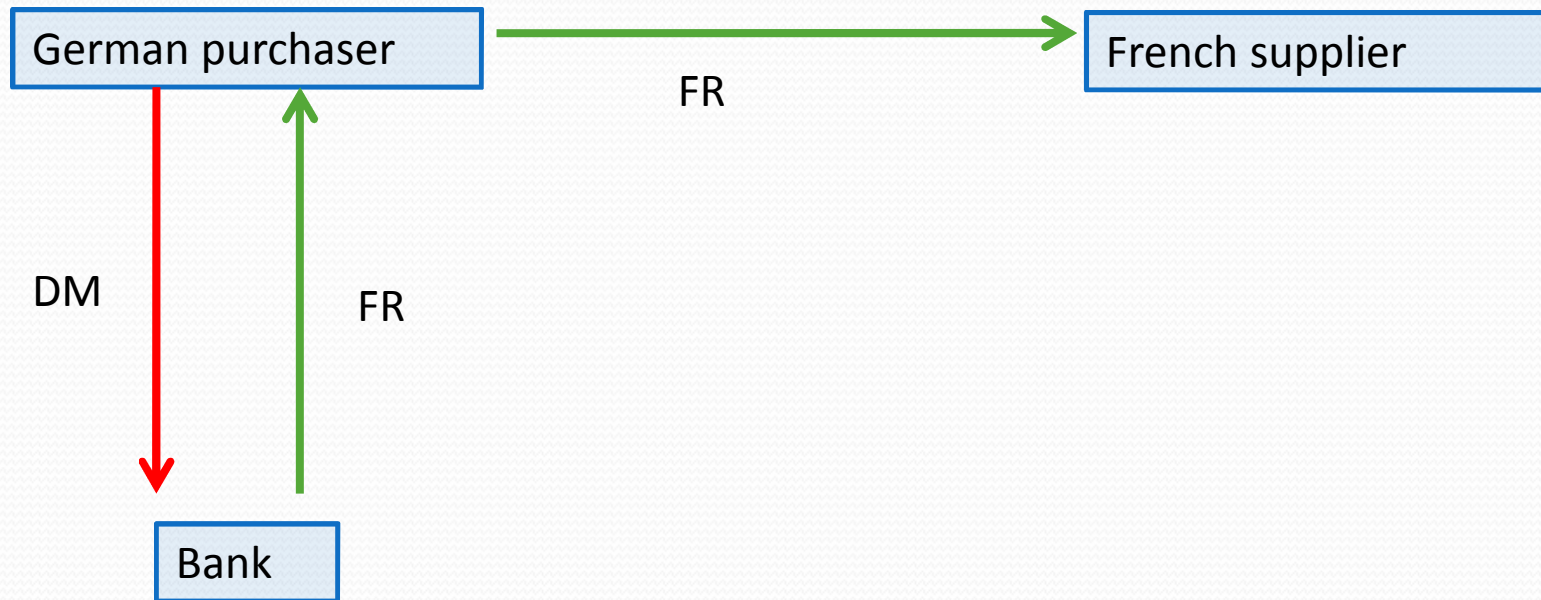
- Conception
 - Why the euro was created
 - Foreseen challenges
- Complications
 - The European Central Bank's role
 - Bank capital adequacy rules
 - Enforcement issues
 - Weaker countries admitted
- Prognosis

Conception: Why the euro was created

Foreign exchange fluctuations

1. Transaction costs
2. Transaction risk
3. Translation risk
4. Economic risk

Transaction costs

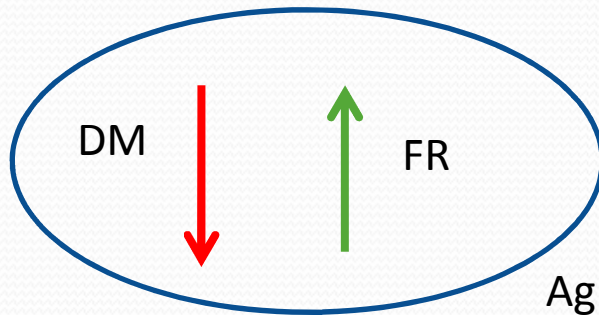


Transaction risk

FR payment due in 6 months time

German purchaser

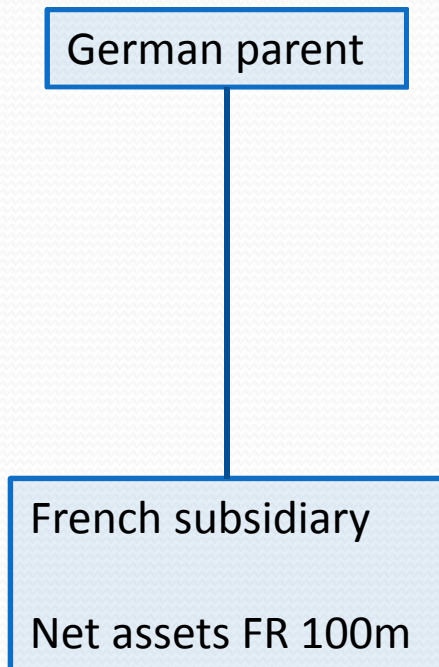
French supplier



Agree now to exchange DM for FR in 6 months at rate fixed today

Bank

Translation risk



Accounts

1.1.1995 FR1 = DM1

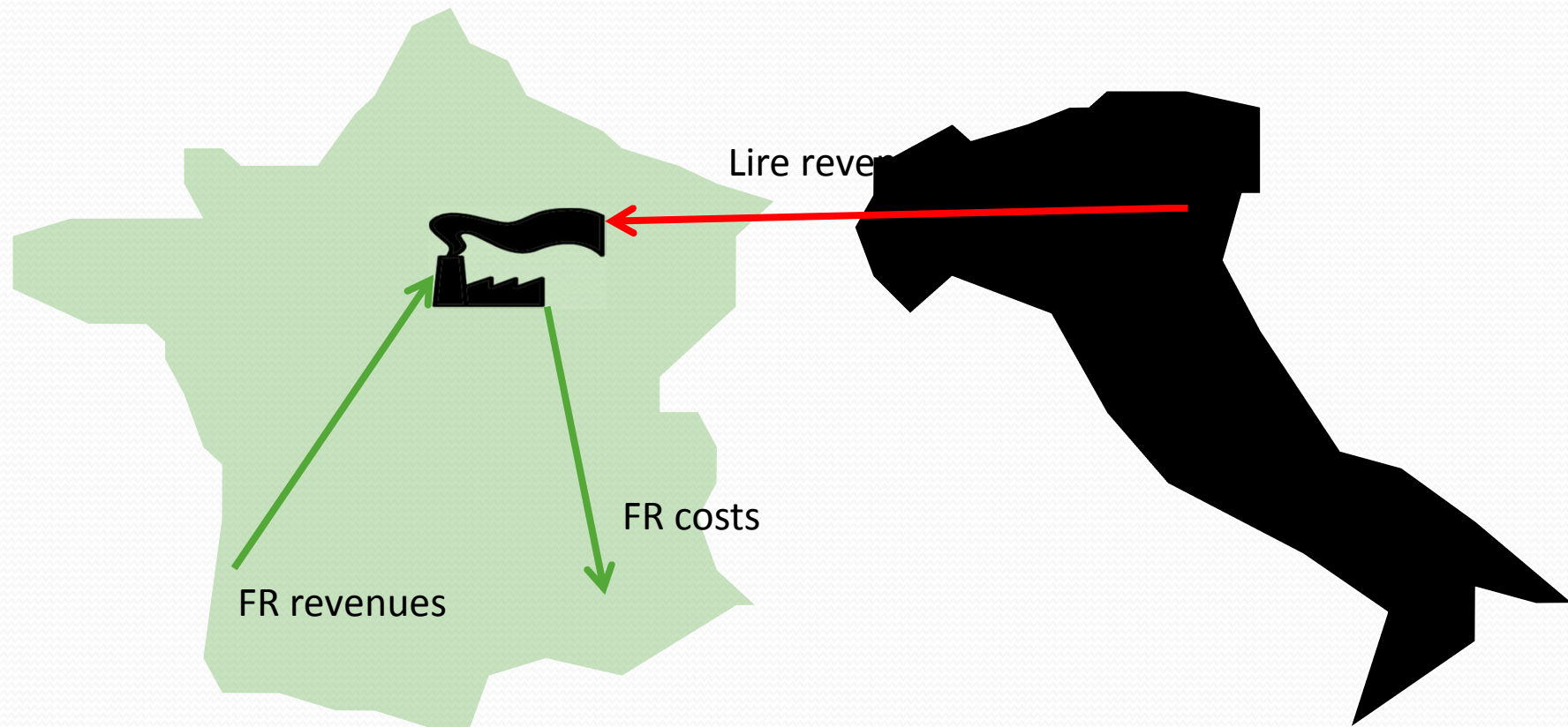
Accounting value of sub = DM 100m

31.12.1995 FR1 = DM 0.9

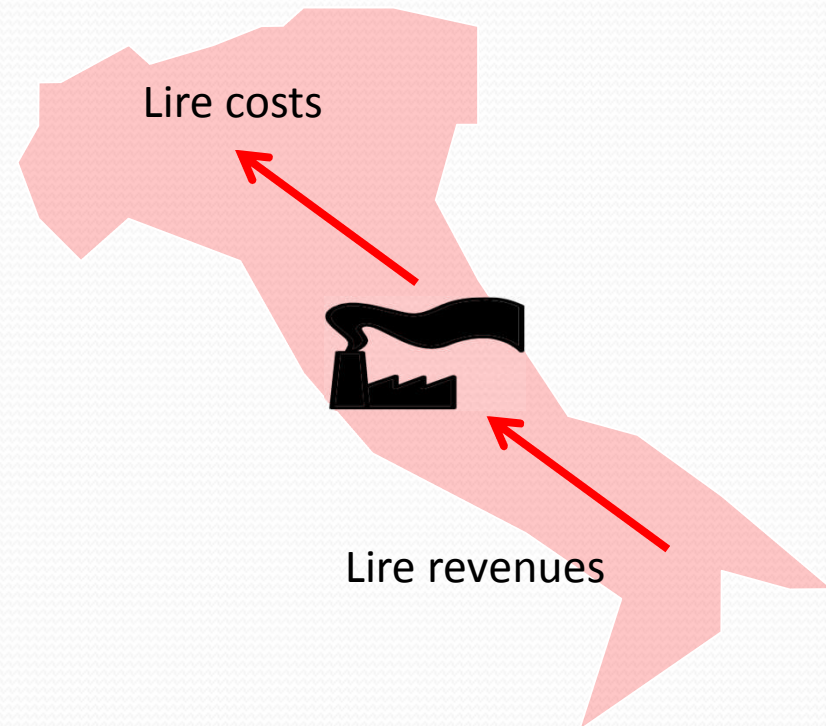
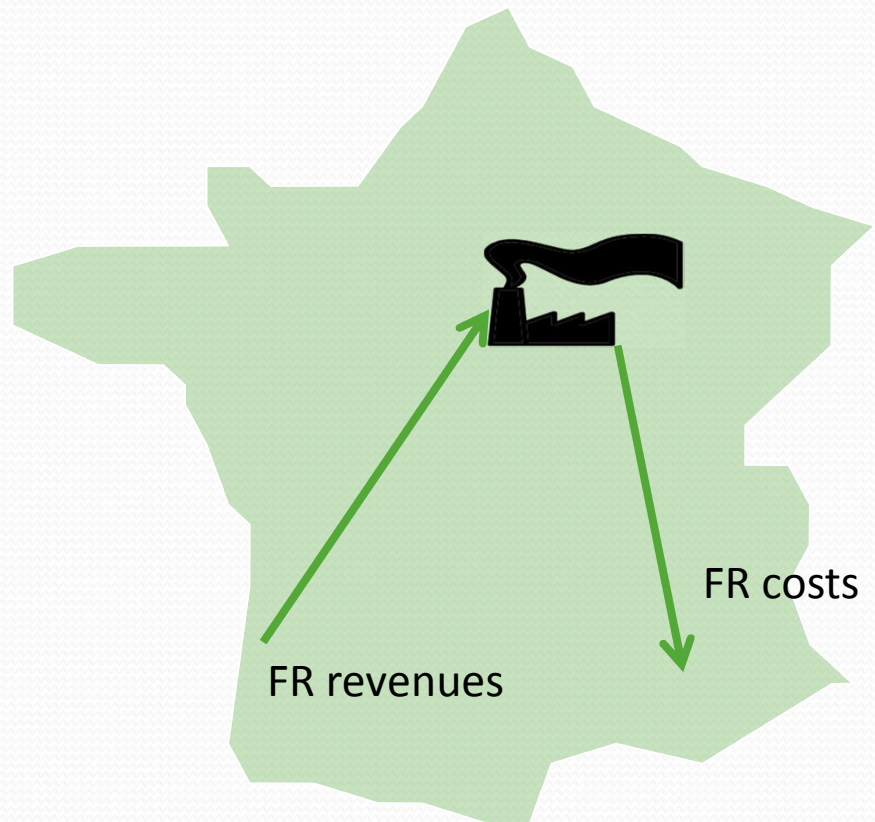
Accounting value of sub = DM 90m

Exchange loss in accounts = DM 10m

Economic risk



Economic risk leads to fragmentation



Empirical research - manufacturing

- Geographical industry concentration in Europe compared to USA by Göran Lindqvist on Sep 15, 2008
 - <http://www.slideshare.net/GoranLindqvist/geographical-industry-concentration-in-europe-compared-to-usa-presentation>
- EVOLVING GEOGRAPHICAL CONCENTRATION OF EUROPEAN MANUFACTURING INDUSTRIES by Marius Brülhart, University of Lausanne, Second revised version, December 2000
 - <http://www.hec.unil.ch/mbrulhar/papers/wwa01.pdf>

Empirical research – banking

- STRUCTURAL INDICATORS FOR THE EU BANKING SECTOR by ECB
 - Concentration measures are by country, not across EU
 - <http://www.ecb.int/pub/pdf/other/structralindicatorseubankingsector201001en.pdf>
- Banking Industry Profitability and Structure – textbook with US concentration ratios towards the end
 - <http://www.saylor.org/site/wp-content/uploads/2011/07/ECON302-3.3.pdf>

Summary of objectives

- Increase:
 - Cross border manufacturing integration
 - Cross border wholesale financial services: one euro area bond market
 - Cross border equity investment
 - Cross border retail financial services
- Key step in creation of world's largest single market.

Complications: In advance

Known challenges

- Loss of control over country monetary policy
 - Increasing / reducing taxes ✓
 - Increasing / reducing money supply ✗
 - Raising / lowering interest rates ✗
- Limited fiscal integration
- Response to asymmetric shocks
- Limited labour mobility
- Optimal size of currency areas

Limited fiscal integration

Region	GDP ' bn	Central taxes / budget	%
USA FY2012	\$ 15,800	\$ 2,630	16.6
EU total 2011	\$ 17,960	\$ 206	1.1

Cross border bond investment risks

German investor in Italian government bonds

	Before euro	After euro
Lire devaluation	✓	✗
Italian inflation	✓	✗
Credit risk	✗	✓

Currency area theory

- A Theory of Optimum Currency Areas by Robert Mundell 1961
 - <http://www.aeaweb.org/aer/top20/51.4.657-665.pdf>
- WHY EUROPEAN UNION IS NOT AN OPTIMAL CURRENCY AREA: THE LIMITS OF INTEGRATION by Yrd. Doç. Dr. Hüseyin Mualla YÜCEOL, 2006
 - http://eab.ege.edu.tr/pdf/6_2/C6-S2-M6.pdf

Complications: Unexpected

Stability and Growth Pact

- http://ec.europa.eu/economy_finance/economic_governance/sgp/index_en.htm
- Deficit over 3% of GDP triggers “Excessive Deficit Procedure”
- Germany and France early violators
 - EDP not enforced on them
 - Made it hard to deal with other violators

ECB Structure

- Independent central bank
- Prohibited from financing countries
- Key priority: inflation

Economic competitiveness

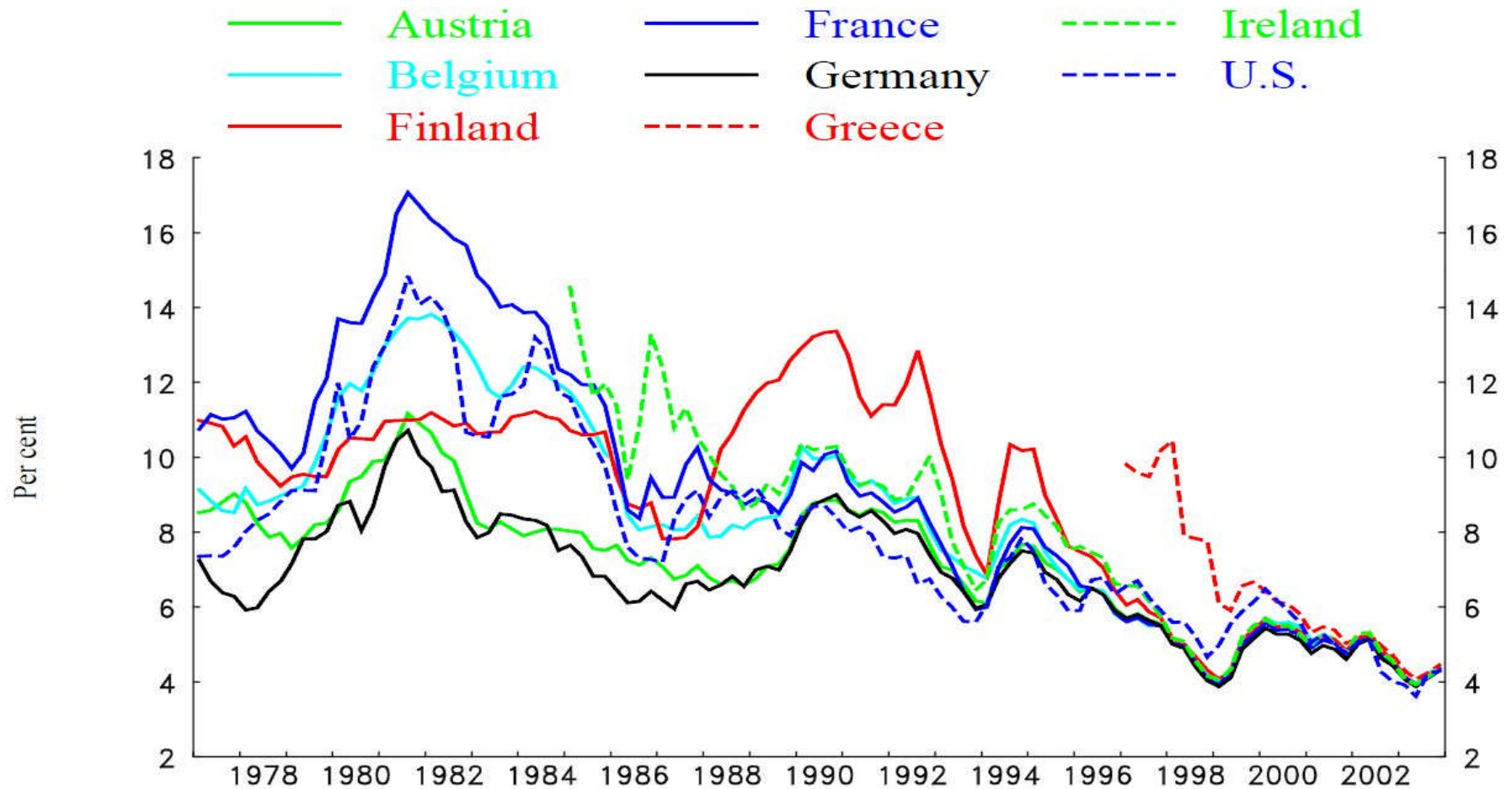
- Germany Hartz reforms 2002-2005
 - Improved labour market
- Major labour market problems
 - Italy
 - Spain
 - Portugal
 - Greece (and other Greek problems)
 - Result = high unemployment, low growth

Bank capital adequacy

- All EU sovereign bonds classified as risk free.
- Banks purchased the highest yielders.
- Major compression in spreads.
- Convergence of Government Bond Yields in the Euro Zone: The Role of Policy Harmonization by Denise Côté and Christopher Graham
 - <http://www.bankofcanada.ca/wp-content/uploads/2010/02/wp04-23.pdf>

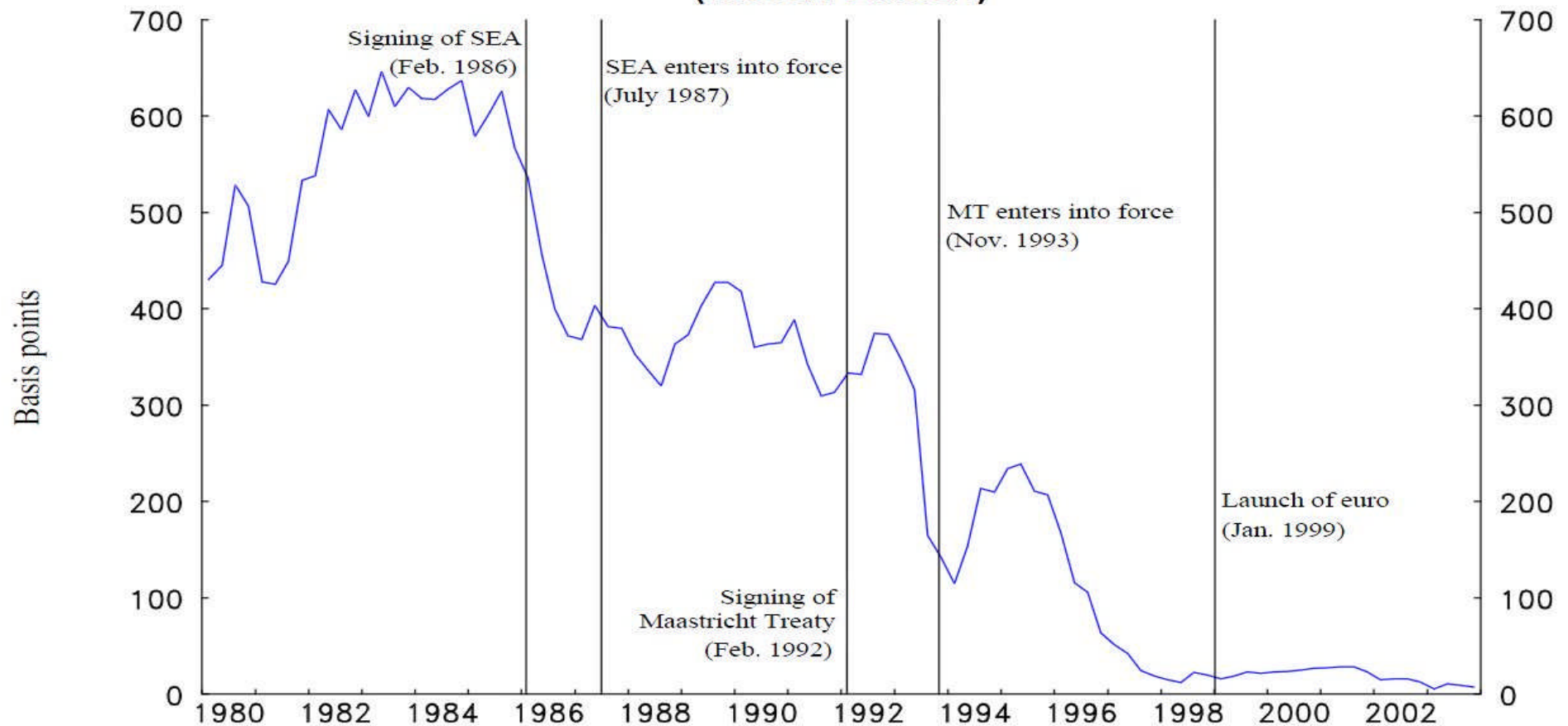
Convergence of bond yields

10-Year Government Bond Yield
(1977Q1-2003Q4)



Average spread over Germany

Average Spread of Long-Term Government Bond Yields from the German Yield*
(1980Q1-2003Q4)



* Includes Austria, Belgium, Finland, France, Italy, the Netherlands, Portugal, and Spain.

Country problems

- Greece: unsustainable debt, dysfunctional state
- Spain: real estate collapse, high unemployment
- Portugal: high unemployment
- Ireland: failure banking system, liabilities taken over by state
- Italy: lack of economic growth
- France: persistent deficits

Debt to GDP % ratios 2010

<http://epp.eurostat.ec.europa.eu/portal/page/portal/euroindicators/pees/>

Greece	144.9
Italy	118.4
Belgium	96.2
Portugal	93.3
Ireland	92.5
Germany	83.2
France	82.3
United Kingdom	79.9
Austria	71.8
Netherlands	62.9
Spain	61.0

How much does default matter?

- US experience
- U.S. Municipal Bond Defaults and Recoveries, 1970-2009 by Moody's Investor Services
 - http://www.naic.org/documents/committees_e_capad_vos_c1_factor_review_sg_related_docs_moodys_us_municipal_bonds.pdf
- Are bonds held by insurance companies / HNW Individuals / Pension funds **or by banks?**

Prognosis

Orderly departures from euro?

- What would you do with money in Spanish bank?
- Eurozone banks already facing funding challenges
- Not viable concept

Eurobonds

- Collective obligation for borrowings
- German political opposition
 - Why increase German borrowing costs?
 - Can you trust the weaker countries to behave?

ECB Funding of countries

- Prohibited by law
- Indirectly achieved by market purchases of bonds in money market operations
- Indirectly achieved by funding banks, e.g. €489 bn three year repos in December 2011
 - Banks use some of the money to buy bonds

Is deficit reduction stupid?

- Geoffrey Howe budget 1980
- George Osborne budget 2010
- German prescriptions for Europe
- Growth depends on:
 - Aggregate demand (Keynesian analysis)
 - Microeconomic improvement

Conclusions

- The goal of the EU is “an ever closer union.”
- Europe’s past leaders saw the euro as essential to this goal.
- Europe’s leaders today face many problems but are committed to the euro’s survival.